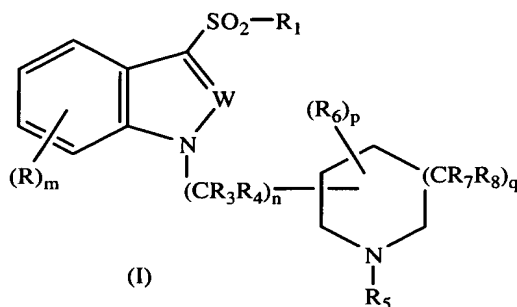


## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1. (Currently Amended) A compound of formula I



wherein

W is  $[[N \text{ or }]] CR_2$ ;

R is halogen, CN,  $OCO_2R_9$ ,  $CO_2R_{10}$ ,  $CONR_{11}R_{12}$ ,  $SO_xR_{13}$ ,  $NR_{14}R_{15}$ ,  $OR_{16}$ ,  $COR_{17}$  or a  $C_1$ - $C_6$ alkyl,  $C_2$ - $C_6$ alkenyl,  $C_2$ - $C_6$ alkynyl,  $C_3$ - $C_7$ cycloalkyl, aryl or heteroaryl group each optionally substituted;

$R_1$  is an optionally substituted  $C_1$ - $C_6$ alkyl,  $C_3$ - $C_7$ cycloalkyl, aryl, or heteroaryl group or an optionally substituted 8- to 13-membered bicyclic or tricyclic ring system having a N atom at the bridgehead and optionally containing 1, 2 or 3 additional heteroatoms selected from N, O or S;

$R_2$  is H, halogen, or a  $C_1$ - $C_6$ alkyl,  $C_1$ - $C_6$ alkoxy,  $C_3$ - $C_7$ cycloalkyl, aryl or heteroaryl group each optionally substituted;

$R_3$  and  $R_4$  are each independently H or an optionally substituted  $C_1$ - $C_6$ alkyl group;

$R_5$  is H or a  $C_1$ - $C_6$ alkyl,  $C_2$ - $C_6$ alkenyl,  $C_2$ - $C_6$ alkynyl,  $C_3$ - $C_7$ cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted;

$R_6$  is a  $C_1$ - $C_6$ alkyl,  $C_3$ - $C_7$ cycloalkyl,  $C_2$ - $C_6$ alkenyl or  $C_2$ - $C_6$ alkynyl group each optionally substituted;

$R_7$  and  $R_8$  are each independently H or a  $C_1$ - $C_6$ alkyl,  $C_3$ - $C_7$ cycloalkyl,  $C_2$ - $C_6$ alkenyl or  $C_2$ - $C_6$ alkynyl group each optionally substituted;

m, n and p are each independently 0 or an integer of 1, 2 or 3;

q and x are each independently 0 or an integer of 1 or 2;

$R_9$ ,  $R_{10}$ ,  $R_{13}$  and  $R_{17}$  are each independently H or a  $C_1$ - $C_6$ alkyl,  $C_2$ - $C_6$ alkenyl,  $C_2$ - $C_6$ alkynyl,  $C_3$ - $C_6$ cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted;

R<sub>11</sub> and R<sub>12</sub> are each independently H or an optionally C<sub>1</sub>-C<sub>6</sub>alkyl group or R<sub>11</sub> and R<sub>12</sub> may be taken together with the atom to which they are attached to form a 5- to 7-member ring optionally containing another heteroatom selected from O, N or S;

R<sub>14</sub> and R<sub>15</sub> are each independently H or an optionally substituted C<sub>1</sub>-C<sub>4</sub>alkyl group or R<sub>14</sub> and R<sub>15</sub> may be taken together with the atom to which they are attached to form a 5- to 7-membered ring optionally containing another heteroatom selected from O, NR<sub>18</sub> or SO<sub>x</sub>;

R<sub>16</sub> is a C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl, C<sub>3</sub>-C<sub>7</sub>cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted; and

R<sub>18</sub> is H or a C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl, C<sub>3</sub>-C<sub>7</sub>cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted; or

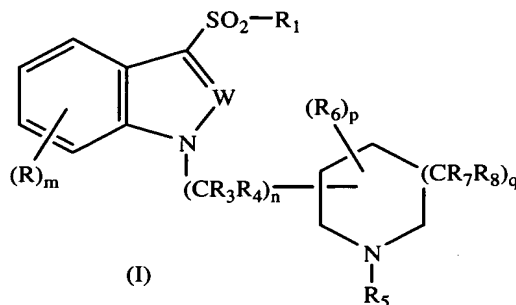
the stereoisomers thereof or the pharmaceutically acceptable salts thereof.

2. (Original) The compound according to claim 1 wherein n is 0.
3. (Original) The compound according to claim 1 wherein R<sub>5</sub> is H.
4. (Original) The compound according to claim 1 wherein R<sub>1</sub> is an optionally substituted phenyl group.
5. (Original) The compound according to claim 2 wherein q is 0 or 1.
6. (Original) The compound according to claim 2 wherein m is 0 and p is 0.
7. (Original) The compound according to claim 5 wherein the piperidinyl or pyrrolidinyl group is attached in the 3-position.
8. (Original) The compound according to claim 6 wherein R<sub>1</sub> is an optionally substituted phenyl group and q is 0 or 1.
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) A pharmaceutical composition which comprises a pharmaceutically acceptable carrier and an effective amount of a compound of formula I



wherein

W is  $[[N \text{ or }]] CR_2$ ;

R is halogen, CN,  $OCO_2R_9$ ,  $CO_2R_{10}$ ,  $CONR_{11}R_{12}$ ,  $SO_xR_{13}$ ,  $NR_{14}R_{15}$ ,  $OR_{16}$ ,  $COR_{17}$  or a  $C_1$ - $C_6$ alkyl,  $C_2$ - $C_6$ alkenyl,  $C_2$ - $C_6$ alkynyl,  $C_3$ - $C_7$ cycloalkyl, aryl or heteroaryl group each optionally substituted;

$R_1$  is an optionally substituted  $C_1$ - $C_6$ alkyl,  $C_3$ - $C_7$ cycloalkyl, aryl, or heteroaryl group or an optionally substituted 8- to 13-membered bicyclic or tricyclic ring system having a N atom at the bridgehead and optionally containing 1, 2 or 3 additional heteroatoms selected from N, O or S;

$R_2$  is H, halogen, or a  $C_1$ - $C_6$ alkyl,  $C_1$ - $C_6$ alkoxy,  $C_3$ - $C_7$ cycloalkyl, aryl or heteroaryl group each optionally substituted;

$R_3$  and  $R_4$  are each independently H or an optionally substituted  $C_1$ - $C_6$ alkyl group;

$R_5$  is H or a  $C_1$ - $C_6$ alkyl,  $C_2$ - $C_6$ alkenyl,  $C_2$ - $C_6$ alkynyl,  $C_3$ - $C_7$ cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted;

$R_6$  is a  $C_1$ - $C_6$ alkyl,  $C_3$ - $C_7$ cycloalkyl,  $C_2$ - $C_6$ alkenyl or  $C_2$ - $C_6$ alkynyl group each optionally substituted;

$R_7$  and  $R_8$  are each independently H or a  $C_1$ - $C_6$ alkyl,  $C_3$ - $C_7$ cycloalkyl,  $C_2$ - $C_6$ alkenyl or  $C_2$ - $C_6$ alkynyl group each optionally substituted;

m, n and p are each independently 0 or an integer of 1, 2 or 3;

q and x are each independently 0 or an integer of 1 or 2;

$R_9$ ,  $R_{10}$ ,  $R_{13}$  and  $R_{17}$  are each independently H or a  $C_1$ - $C_6$ alkyl,  $C_2$ - $C_6$ alkenyl,  $C_2$ - $C_6$ alkynyl,  $C_3$ - $C_6$ cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted;

$R_{11}$  and  $R_{12}$  are each independently H or an optionally  $C_1$ - $C_6$ alkyl group or  $R_{11}$  and  $R_{12}$  may be taken together with the atom to which they are attached to form a 5- to 7-member ring optionally containing another heteroatom selected from O, N or S;

$R_{14}$  and  $R_{15}$  are each independently H or an optionally substituted  $C_1$ - $C_4$ alkyl group or  $R_{14}$  and  $R_{15}$  may be taken together with the atom to which they are attached to form a 5- to 7-membered ring optionally containing another heteroatom selected from O,  $NR_{18}$  or  $SO_x$ ;

$R_{16}$  is a  $C_1$ - $C_6$ alkyl,  $C_2$ - $C_6$ alkenyl,  $C_2$ - $C_6$ alkynyl,  $C_3$ - $C_7$ cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted; and

$R_{18}$  is H or a  $C_1$ - $C_6$ alkyl,  $C_2$ - $C_6$ alkenyl,  $C_2$ - $C_6$ alkynyl,  $C_3$ - $C_7$ cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted; or the stereoisomers thereof or the pharmaceutically acceptable salts thereof.

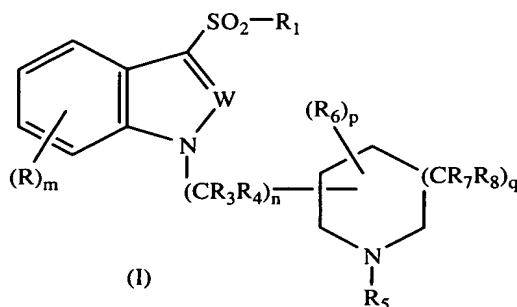
16. (Original) The composition according to claim 15 having a formula I compound wherein n is 0.

17. (Original) The composition according to claim 16 having a formula I compound wherein  $R_5$  is H and q is 0 or 1.

18. (Original) The composition according to claim 17 having a formula I compound wherein  $R_1$  is an optionally substituted phenyl group.

19. (Original) The composition according to claim 18 having a formula I compound wherein the piperidinyl or pyrrolidinyl group is attached in the 3-position.

20. (Currently Amended) A process for the preparation of a compound of formula I



wherein

W is  $[N \text{ or } ] CR_2$ ;

R is halogen, CN, OCO<sub>2</sub>R<sub>9</sub>, CO<sub>2</sub>R<sub>10</sub>, CONR<sub>11</sub>R<sub>12</sub>, SO<sub>x</sub>R<sub>13</sub>, NR<sub>14</sub>R<sub>15</sub>, OR<sub>16</sub>, COR<sub>17</sub> or a C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl, C<sub>3</sub>-C<sub>7</sub>cycloalkyl, aryl or heteroaryl group each optionally substituted;

R<sub>1</sub> is an optionally substituted C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>3</sub>-C<sub>7</sub>cycloalkyl, aryl, or heteroaryl group or an optionally substituted 8- to 13-membered bicyclic or tricyclic ring system having a N atom at the bridgehead and optionally containing 1, 2 or 3 additional heteroatoms selected from N, O or S;

R<sub>2</sub> is H, halogen, or a C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>1</sub>-C<sub>6</sub>alkoxy, C<sub>3</sub>-C<sub>7</sub>cycloalkyl, aryl or heteroaryl group each optionally substituted;

R<sub>3</sub> and R<sub>4</sub> are each independently H or an optionally substituted C<sub>1</sub>-C<sub>6</sub>alkyl group;

R<sub>5</sub> is H or a C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl, C<sub>3</sub>-C<sub>7</sub>cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted;

R<sub>6</sub> is a C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>3</sub>-C<sub>7</sub>cycloalkyl, C<sub>2</sub>-C<sub>6</sub>alkenyl or C<sub>2</sub>-C<sub>6</sub>alkynyl group each optionally substituted;

R<sub>7</sub> and R<sub>8</sub> are each independently H or a C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>3</sub>-C<sub>7</sub>cycloalkyl, C<sub>2</sub>-C<sub>6</sub>alkenyl or C<sub>2</sub>-C<sub>6</sub>alkynyl group each optionally substituted;

m, n and p are each independently 0 or an integer of 1, 2 or 3;

q and x are each independently 0 or an integer of 1 or 2;

R<sub>9</sub>, R<sub>10</sub>, R<sub>13</sub> and R<sub>17</sub> are each independently H or a C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl, C<sub>3</sub>-C<sub>6</sub>cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted;

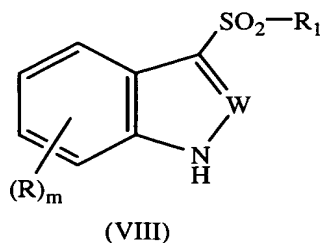
R<sub>11</sub> and R<sub>12</sub> are each independently H or an optionally C<sub>1</sub>-C<sub>6</sub>alkyl group or R<sub>11</sub> and R<sub>12</sub> may be taken together with the atom to which they are attached to form a 5- to 7-member ring optionally containing another heteroatom selected from O, N or S;

R<sub>14</sub> and R<sub>15</sub> are each independently H or an optionally substituted C<sub>1</sub>-C<sub>4</sub>alkyl group or R<sub>14</sub> and R<sub>15</sub> may be taken together with the atom to which they are attached to form a 5- to 7-membered ring optionally containing another heteroatom selected from O, NR<sub>18</sub> or SO<sub>x</sub>;

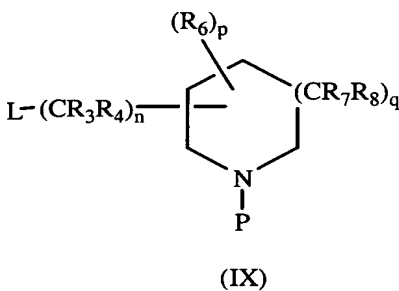
R<sub>16</sub> is a C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl, C<sub>3</sub>-C<sub>7</sub>cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted; and

R<sub>18</sub> is H or a C<sub>1</sub>-C<sub>6</sub>alkyl, C<sub>2</sub>-C<sub>6</sub>alkenyl, C<sub>2</sub>-C<sub>6</sub>alkynyl, C<sub>3</sub>-C<sub>7</sub>cycloalkyl, cycloheteroalkyl, aryl or heteroaryl group each optionally substituted

which process comprises reacting a compound of formula VIII



wherein W, R, R<sub>1</sub> and m are as described hereinabove with a protected azacyclic compound of formula IX



wherein P is a protecting group; L is a leaving group; and R<sub>3</sub>, R<sub>4</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, n, p and q are as described hereinabove in the presence of a first base to give the protected formula I compound; and deprotecting said compound to give the free amine of formula I wherein R<sub>5</sub> is H optionally alkylating said amine with an alkylating agent, R<sub>5</sub>-L', wherein L' is a leaving group in the presence of a second base.